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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/610,933	06/30/2003	Josh Hogan	10002759.4	2541

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EXAMINER

CHU, KIM KWOK

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/610,933	<b>Applicant(s)</b> HOGAN, JOSH	
	<b>Examiner</b> Kim-Kwok CHU	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on Remarks filed on 7/10/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/542,404.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

***Response to Remarks***

1. Applicant's Remarks filed on July 10, 2005 have been fully considered. A newly found art is cited to reject Claims 1-8.

With respect to the rejected Claims 6 and 8, Applicant states that the prior art of Spruit does not teach or suggest "writing a data set, with write timing ...." or "adjusting the write timing" (page 6 of the Remarks, lines 16 and 17).

Accordingly, the prior art of Spruit's test pattern is a series encoded and modulated data with different mark lengths and spaces. Such mark lengths and spaces can be considered as "write timing" with adjustable/variable sequences of data strings. Similarly, the present cited prior art of Shoji et al. (U.S. Patent 6,157,609) teaches a plurality of test patterns generating means 127 where the test pattern includes "write timing" information such as mark lengths and spaces as a recording references in order to record correct data strings so that the read data can be reproduced at a lowest error rate.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless -  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

3. Claims 1-8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Shoji et al. (U.S. Patent 6,157,609).

4. Shoji teaches a method of adjusting write timing for an optical disc having all of the steps as recited in claims 1-4.

For example, Shoji teaches the following:

(a) With respect to Claim 1, writing a data set (test patterns) with a write timing (pulse width, marks and spaces), at an area on an optical disc that has spatial features (tracks) that distort an analog read data signal (reproduced error is a kind of distort caused by tracking error), the distortion (reproduced error) varying as a function of write timing (data pattern), where the data set (each test pattern) has a characterized (corresponding) read error rate as a function of write timing (pulse width, marks and spaces) at the

area that has the spatial features (Figs. 1, 12 and 38, each test pattern has its corresponding error rate; column 22, lines 37-49); reading the data set from the optical disc (Fig. 1); determining a read error rate for the data set (column 31, lines 14-20); adjusting the write timing based on comparing the read error rate of the data set and the characterized read error rate as a function of write timing (column 26, lines 34-39; column 31, lines 14-20).

(b) With respect to Claim 2, observing whether the read error rate increases when write timing is shifted in one direction (Fig. 1; position detector 120 detects error increase when the marks is longer than normal).

(c) With respect to Claim 3, observing whether the read error rate decreases when the write timing is shifted in one direction (Fig. 1; position detector 120 detects error decrease when the marks is closer to normal).

(d) With respect to Claim 4, repeating (interpolating) the steps of writing a data set (test patterns), reading the data set, and determining a read error rate for the data set, multiple times (Fig. 10; column 28, lines 36-45).

5. Claim 5 has limitations similar to those treated in the above rejection of claims 1 and 4, and is met by the reference as discussed above. Claim 5 however also recites the following limitations "selecting a lowest read error rate among the first and second read error rates" which is taught by the prior art of Shoji et al. (Fig. 1; data comparator compares test patterns and read data so that lowest read error rate can be obtained).

6. Claim 6 has limitations similar to those treated in the above rejection of claims 1 and 4, and is met by the reference as discussed above.

7. Claim 7 has limitations similar to those treated in the above rejection of claims 1 and 4, and is met by the reference as discussed above. Claim 7 however also recites the following limitations "choosing a write timing corresponding to the lowest read error rate" which is taught by the prior art of Shoji et al. (Fig. 1; data comparator 131 compares test patterns and read data and then adjusted the correct write timing/position).

8. Claim 8 has limitations similar to those treated in the above rejection of claims 1 and 4, and is met by the reference as discussed above.

9. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch, can be reached on (57) 272-7589.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

Kim-Kwok CHU

*kc* 9/21/2006  
Examiner AU2627  
September 21, 2006

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